

Page Denied

Next 1 Page(s) In Document Denied

~~TOP SECRET~~

S 13163

No. Pages 9

Copy No. 1 of 180

8 June 1964

Current Support Brief

EXPANSION
OF SOVIET CRUISE-MISSILE SUBMARINE FORCE



CIA/RR CB SC 64-15-K11

THIS DOCUMENT CONTAINS CODE WORD MATERIAL

CENTRAL INTELLIGENCE AGENCY

Office of Research and Reports

~~TOP SECRET~~

GROUP 1
Excluded from automatic
downgrading and
declassification

TOP SECRET

RUFF

25X1

EXPANSION
OF SOVIET CRUISE-MISSILE SUBMARINE FORCE

The USSR apparently considers the cruise-missile submarine to be the most important single type for immediate production. Increased Soviet emphasis probably has been given to the construction of this type, which probably will constitute at least one-half of the total production of all submarines in the USSR for the next few years.

Production of the diesel-powered G-class and the nuclear-powered H-class ballistic-missile submarines is believed to have ceased, and there is no evidence at this time of follow-on programs. In addition, there has been some reduction in production of the F-class diesel-powered torpedo attack type. These programs seem to have been replaced in part by construction of two types of cruise-missile submarines: the E class and the new J class (diesel-powered).

The Soviet view of the importance of cruise-missile submarines is implied by the utilization of shipyard facilities. For the first time since 1957, each of the three shipyards that have been engaged in production of submarines now is constructing this same type. More important is the simultaneous construction in two of these shipyards of the E class. The E class is the first class of nuclear-powered submarine to be constructed in more than one shipyard at the same time.

ILLEGIB

TOP SECRET

RUFF

25X1

TOP SECRET [REDACTED]

RUFF

25X1

Improvements in the SS-N-3 cruise missile indicate that this system now is capable of striking either ships at sea or land targets at ranges up to 450 nautical miles (nm). The initial SS-N-3 system, having a range of 300 nm, is believed to have been developed as a weapon for use primarily against ships (carriers) and secondarily against land targets. The extension of range to 450 nm greatly enhanced its capability and probably is one of the major factors that brought about the decision to expand the cruise-missile submarine force. About 23 such vessels, having a total of about 110 launchers, are estimated to be operational. Of these, 10 or 11 are of the E class, 1 is of the new J class, and 11 are conversions of the W class.* Further conversions of the W class are not expected, however. Production of both the E class, at a rate of four or five per year, and the J class, at a rate of three to five per year, is expected to continue during the next 3 to 5 years.

1. Construction Program for E-Class Submarines

The E class is under construction in both Shipyard No. 402 in Severodvinsk and Shipyard No. 199 in Komsomol'sk.

25X1

[REDACTED] showed a total of six E-class submarines, the greatest number observed in any mission and the first mission in which the E class has been observed in the Northern Fleet area. Two were seen at Litsa Bay in the Northern Fleet area, and four in the Pacific Fleet area. The two at Litsa Bay have been identified as Mod II type. Two of the four in the Pacific (those at Petrovka) have been identified as Mod I type, and the other two (one at Dunay and one at Petropavlovsk) are believed to be of the Mod II type. Total construction through 1963 in the Pacific area was six Mod I and two Mod II types. All of these were constructed at Shipyard No. 199 in Komsomol'sk.

The two E-class Mod II submarines observed in the Northern Fleet area are believed to have been constructed at Shipyard No. 402 in Severodvinsk. There is good evidence that only two Mod II have been constructed to date in the Far East and that these are now in the Pacific Fleet area.

25X1

* The single cylinder conversion of the W class is not included in this publication.

TOP SECRET [REDACTED]

RUFF

25X1

TOP SECRET

RUFF

25X1

25X1

2. Shipyard No. 402 in Severodvinsk

Since 1957, Shipyard No. 402 has been engaged in building the G-class, H-class, and N-class submarines. Production of the G class ceased at this yard in the summer of 1962, and construction of the H class probably ceased during 1963. There is no evidence at this time of a follow-on ballistic-missile program. Construction of the N class is believed to be continuing. Therefore, if construction of nuclear-powered types at Severodvinsk is confined only to the E and N classes, as appears likely, production of the E class during the next few years at Shipyard No. 402 could rise to a level of two or three units per year.

Even with an increase in the program for the E class and the continuation of production of the N class, Shipyard No. 402 would have adequate capacity to carry on additional programs. The appearance in 1962 and 1963 of the liquid-fueled SS-N-5 missile, a ballistic missile that has a range of about 700 nm and is capable of submerged launching, suggested that a nuclear-powered follow-on design to the H class would be constructed at Shipyard No. 402. It now is believed, however, that a more likely program would be to retrofit the H-class and perhaps some G-class submarines with the SS-N-5 missile systems. Although it is still possible that a follow-on program for the SS-N-5 system may appear, the construction of the E class would tend to reduce the rate of construction of the follow-on program even if undertaken. Moreover, since the appearance of the first of the J class in the Baltic in September 1963, there has been considerable speculation that such a program also is underway at Shipyard No. 402.

3. Shipyard No. 199 in Komsomol'sk

The first two E-class Mod I submarines were delivered in 1960 by Shipyard No. 199 in Komsomol'sk. Through 1963 this shipyard completed six of the Mod I type and two of the Mod II type.

25X1

TOP SECRET

RUFF

25X1

TOP SECRET

RUFF

25X1

4. Total Production of Nuclear Submarines

Production of nuclear-powered submarines in the USSR has held rather steady during the past several years at seven to nine units per year. Because of the reduction in production of the H class, the expanded construction of the E class will not affect the current annual output.

There is insufficient information on production facilities for nuclear reactors to permit an estimate of an annual rate of production of submarine reactors. Apparently some difficulties have been experienced in the operation of shipborne reactors, and these difficulties may have tended to lower the annual rate of production below the capability of the industry. These difficulties, however, are believed to have been largely overcome. It is entirely possible that some increase to more than the seven to nine units per year could be achieved without any major expansion in present production facilities.

Shipyards No. 402 and No. 199 are the only two shipyards in the USSR known as producers of nuclear-powered submarines, probable output of which from 1958 through 1964 is shown in the table.

Probable Output of Nuclear-Powered Submarines
in the USSR
1958-64

	Units						
	1958	1959	1960	1961	1962	1963	1964
Total	<u>7</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>7 to 8</u>	<u>7 to 8</u>
Shipyard No. 402 ^a	<u>1</u>	<u>2</u>	<u>5</u>	<u>5</u>	<u>7</u>	<u>5 to 6</u>	<u>5 to 7</u>
H class	0	1	4	2	3	1 a/	0
H class	1	2	1	3	3	3	3 to 4
E class Mod II b/	0	0	0	0	1	1 to 2	2 to 3
Shipyard No. 199	<u>0</u>	<u>0</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
E class Mod I	0	0	2	2	1	1	0
E class Mod II	0	0	0	0	1	1	2

a. Construction of the H class is believed to have ceased. A few additional units may be constructed and equipped with the SS-N-5 missile system, but a more likely program will be one of retrofitting the H class.

b. Completion of the first unit of this class is estimated for 1962.

- 4 -

TOP SECRET

RUFF

25X1

TOP SECRET

RUFF

25X1

The estimated rate of current construction would permit a slight increase in the rates of production of known types or even a modest production program of a new class.

5. Construction Programs for Other Cruise-Missile Submarines

The appearance of the first Soviet J-class cruise-missile diesel-powered submarine in the Baltic in September 1963* showed that the USSR did not intend then to shift completely to production of the nuclear-powered type as did the US in 1956.

It is still too early to estimate the size of the program for the J class or its effect on other programs for production of diesel-powered submarines. Nevertheless, the rate of production at the Sudomekh Shipyard in Leningrad (producer of the J class) suggests two possibilities: (1) the J class also is being produced elsewhere in the USSR, thereby providing a sizable fleet in the near future, or (2) the USSR will be content with a small fleet built up during a few years from production at the Sudomekh Shipyard alone. No evidence at this time points to either of these possibilities as the more likely. The rate of production of the J class during the next few years is estimated at three to five per year. This estimate includes two or three per year from the Sudomekh Shipyard and perhaps one or two from Shipyard No. 402 or Shipyard No. 199.

Two earlier programs for cruise-missile submarines were the conversion of the W class to two cruise-missile types: (1) the TWIN CYLINDER, a simple conversion by mounting two launchers on the deck, and (2) the LONG BIN, a more complex conversion involving lengthening by adding a section about midship and installing a new sail that houses four missile launchers. Eleven W-class submarines have been converted, but further conversions are not expected.

6. Cruise-Missile Submarine Force

Improvements in the Soviet SS-N-3 cruise missile indicate that this system now is capable of striking either ships at sea or land targets at ranges up to 450 nm. The initial SS-N-3 system, having a range of 300 nm, is believed to have been developed as a weapon for use primarily against ships (carriers) and secondarily against land targets. The extension of range to 450 nm has greatly enhanced its capability and probably was one of the major factors leading to the planned expansion of the cruise-missile submarine force.

* In the same month this unit was transferred to the Northern Fleet.

TOP SECRET

RUFF

25X1

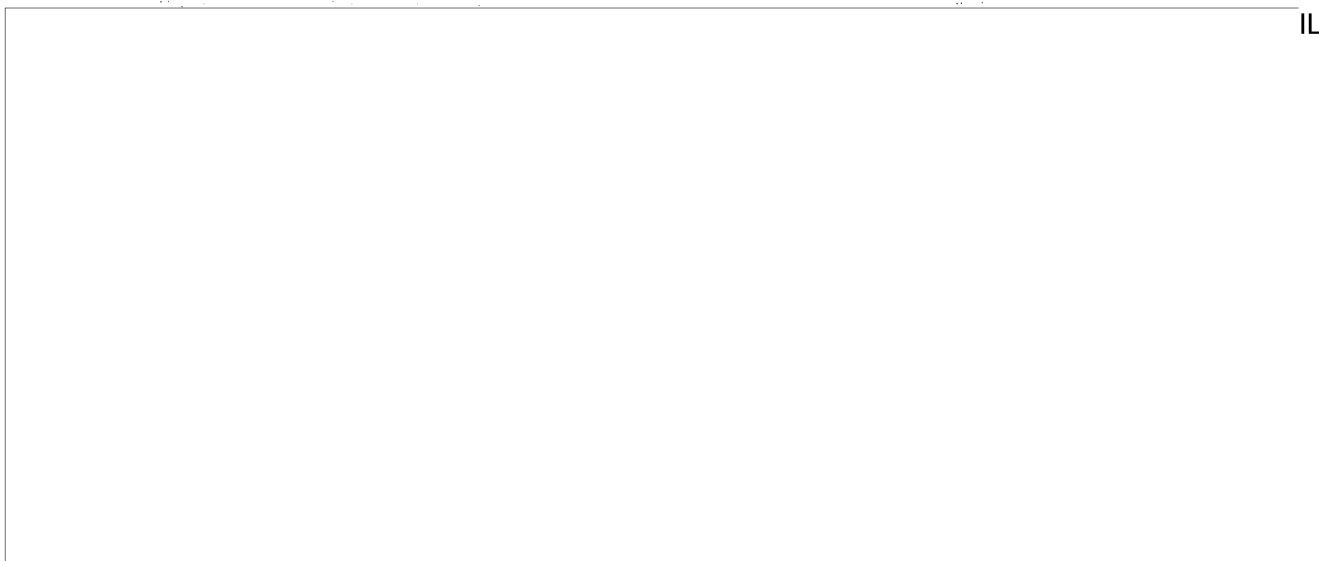
TOP SECRET**RUFF**

25X1

This current expansion suggests a shift in priority away from production of ballistic-missile submarines to production of the new and improved cruise-missile submarine of the E class Mod II and of the J class. Production of the G class ceased in 1962, and construction of the H class probably ceased shortly thereafter with the possible completion of only one unit in 1963. It is believed, however, that the potential of the current ballistic-missile submarine force will be improved by retrofitting all of the H class and perhaps a portion of the G class with the new SS-N-5 ballistic missile system that is capable of being launched from a submerged position to a range of about 700 nm.

It is believed that the USSR may consider the current force level of ballistic-missile submarines to be adequate for the present and that a significant improvement in ballistic missiles would be required before a new program would be undertaken. In the meantime the USSR appears to view the SS-N-3 cruise-missile system as one that can significantly bolster the capability of the submarine force.

The following tabulation shows the program for production of cruise-missile submarines and the estimated capability of each class:



ILLEGIB

TOP SECRET**RUFF**

25X1

TOP SECRET



RUFF

25X1

25X1



- 7 -

TOP SECRET



RUFF

25X1